SYSTEMS AND METHODS FOR DYNAMIC BANDWIDTH MANAGEMENT ON A PER SUBSCRIBER BASIS IN A COMMUNICATIONS NETWORK

ABSTRACT OF THE DISCLOSURE

A subscriber bandwidth management process and device that allows users/subscribers in a communications network to dynamically alter bandwidth limits independently in both the uplink and downlink data transmission paths. This is accomplished by providing for a single queue in the uplink transmission path and a single queue in the downlink transmission path. Thus, the user/subscriber can efficiently manage their network access according to the specific activity on the network. The network manager benefits from being able structure bandwidth allocation on a per subscriber basis so that overall data transmission is made more efficient. In addition, the bandwidth manager provides active management of the delivery of data (also known as and referred to herein as traffic shaping) to increase throughput from a gateway device onto the network.